

Work Order ID 150052

Tuesday, August 23, 2016 11:16:33 AM

150052

Page 1

Item ID: D3977-1 Accept ***N1900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bolt
 Start Date: 8/26/2016 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 9/9/2016 Req'd Qty: 5.00 ***5*** Customer:
 Reference: **DAS 21 9-89**

Approvals: Process Plan: _____ Date: **AUG 23 2016** Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3977	A

100 0.00 **DAS 13 9-89**

100

Purchasing

Purchasing

Memo

Issue P/O: **33411**
 Purchase Part Number: 92356A662
 Supplier:McMASTER-CARR
 Certificate of conformity is required

110

Receive & Inspect for Damage & Mat'l Certs

110

Packaging

Packaging

Memo

0.00

5x Sp/6-8-29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause		FAULT CATEGORY																							
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		OTHER : _____																							

Work Order ID 150052

Tuesday, August 23, 2016 11:16:33 AM

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Page 2

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Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bolt

Start Date: 8/26/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 9/9/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

(5)

DAS
38

AUG 29 2016

130

0.00

130

Mill Conv

Memo

0.00

Conventional Milling Machine

DRILL HOLE AS PER DWG

5

0

DAS
32
9-89

16-09-06

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.00

Quality Control

(5)

DAS
38
9-89

SEP 07 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
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Work Order ID 150052***150052***

Page 3

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Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

Identify as per dwg & Stock Location: SK067

0.00

150

Packaging

Memo

0.00

Packaging

S

SEP 07 2016

DAS
6
9-89

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

DAS
21
9-89

SEP 08 2016

DAS
21
9-89

SEP 07 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Tuesday, August 23, 2016 11:16:35 AM

Page 1

Required Qty: 5.00

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

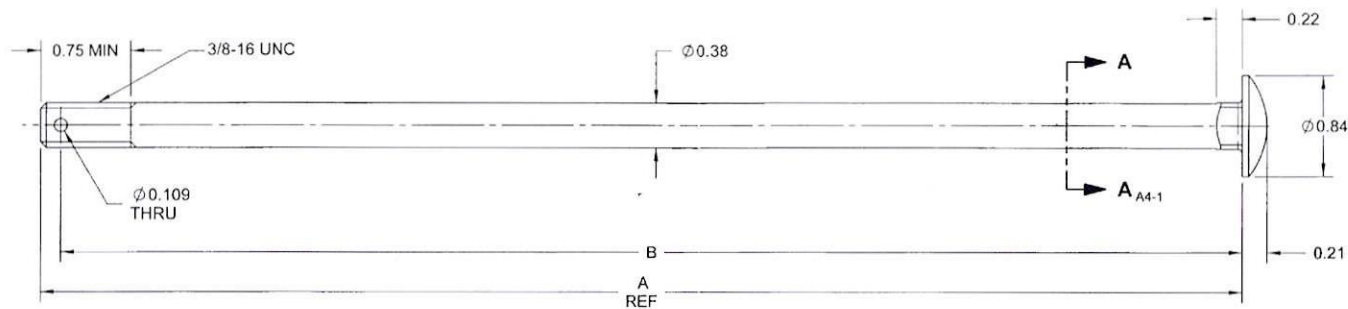
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SPECIFICATION CONTROL DRAWING

SHOP COPY
RETURN TO
ENGINEERING
INCONTROLLED COPY
SUBJECT TO AMENDMENT

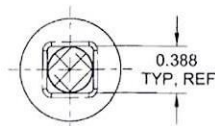
WITHOUT NOTICE
WORK ORDER

150052
MLJ
16-08-23



D3977-X BOLT (CARRIAGE), UNC

DART P/N	A	B	MATERIAL	WEIGHT (lbs)	SUPPLIER	SUPPLIER P/N
D3977-1	10.00	9.830	18-8 STAINLESS STEEL	0.34	McMASTER-CARR	92356A662



SECTION A-A C3-1

- NOTES:
- 1) MATERIAL: SEE TABLE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: SEE TABLE

RELEASE
09/07/13

REV	NEW ISSUE	DESCRIPTION	MB	09 07 13
DESIGN			BY	DATE
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	09.07.13			

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3977 REV. A
SHEET 1 OF 1

TITLE BOLT (CARRIAGE), UNC SCALE NTS

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33411

Purchase Order Date 8/24/2016

PO Print Date 8/24/2016

Page Number 1 of 5

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

AUG 24 2016

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D2484P	Lock Nut	8/26/2016 Yes 8/26/2016		20.00 Each	\$0.38	\$7.66

AS PER DWG D2484 REV. A
B150068
MCMaster P/N: 91343A100

Line Total: \$7.66

2	92356A662	Bolt	8/26/2016 Yes 8/26/2016		5.00 Each	\$5.66	\$28.30
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AS PER DWG D3977 REV. A
B150052

8/16-8-29.

Line Total: \$28.30

Note:

8/24/2016



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Jason.L
Luc

Purchase Order
PO33411
Order Placed By
Chantal Lavoie

McMaster-Carr Number
7750549-02

Page 1 of 1
08/25/2016

Line	Product	Ordered	Shipped
1	91343A100 Type 316 Stainless Steel Serrated-Flange Locknut, 1/4"-20 Thread, 19/32" Flange Diameter, 15/64" Overall HT., Packs of 10	2 Packs	2
2	92356A662 Type 18-8 Stainless Steel Square Neck Carriage Bolt, 3/8"-16 Thread, 10" Long, Packs of 1	5 Packs	5
3	9610K18 MIL Spec. Two-Piece Grommet Kit, Trade Size 2, 0.815" OD, 24 Grommets with Teeth Washers	5 Each	5
5	30345T552 18-8 Stainless Steel Wire Rope Lanyard - Not for Lifting, Loop-to-Tab, 3/64" Rope Diameter, 12" LG, Nylon	10 Each	10
6	2915A47 2 in 1 Countersink, Long, 60 Degree, High-Speed-Steel, Trade Size 6, 7/32" Drill, 6" L	5 Each	5
7	28165A32 Jacobs Keyless Chuck for Cordless Drill, 3/8" Capacity, 3/8"-24 Thread Mount	1 Each	1
8	7605A18 J-B Weld Adhesive, 50112, Quick Setting, 0.85 Ounce Syringe	3 Each	3
9	1394K401 Mobil Grease, Shc 221, HT-Pressure, NLGI Grade 2, 13.4 oz Cartridge, Packs of 10	1 Pack	1
11	9036K499 Blue-Finished and Polished 1095 Spring Steel, .020" Thick, 6" Width, 20' Coil	1 Each	1
Expected to ship			
10	3103A999 Changeable Counterbore Pilot, 3/16" Shank Diameter, .475" Pilot Diameter	10 Each	10 to ship by 09/08